

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
26 May 2005 (26.05.2005)

PCT

(10) International Publication Number
WO 2005/047273 A1

(51) International Patent Classification⁷: **C07D 277/42**,
231/38, 417/10, 417/04, 409/04, A61K 31/4155, 31/427

SCHOEPFER, Joseph [CH/CH]; Steingrubenweg 112,
CH-4125 Riehen (CH).

(21) International Application Number:
PCT/EP2004/012892

(74) Agent: GRUBB, Philip; Novartis AG, Corporate Intellectual Property, CH-4002 Basel (CH).

(22) International Filing Date:
12 November 2004 (12.11.2004)

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0326601.2 14 November 2003 (14.11.2003) GB

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (*for all designated States except AT, US*): NOVARTIS AG [CH/CH]; Lichtstrasse 35, CH-4056 Basel (CH).

(71) Applicant (*for AT only*): NOVARTIS PHARMA GMBH [AT/AT]; Brunner Strasse 59, A-1230 Vienna (AT).

(72) Inventors; and

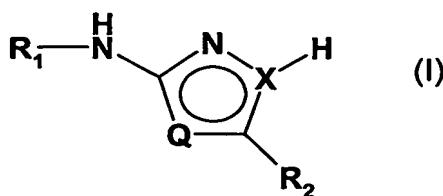
(75) Inventors/Applicants (*for US only*): BOLD, Guido [CH/CH]; Bleumatthoe 16, CH-5073 Gipf-Oberfrick (CH). FLOERSHEIMER, Andreas [DE/CH]; Lehmenweg 38, CH-4143 Dornach (CH). FURET, Pascal [FR/FR]; 24, rue du Riegelsbourg, F-68800 Thann (FR). GUAGNANO, Vito [IT/CH]; Thannerstrasse 66, CH-4054 Basel (CH). MASUYA, Keiichi [JP/JP]; 1-2-1 Tsukaho, Tsukuba-shi, Ibaraki Pref. 300-3257 (JP). VAUPEL, Andrea [DE/CH]; Rüting 23, CH-4125 Riehen (CH).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: THIAZOLE AND PYRAZOLE DERIVATIVES AS FLT-3 KINASE INHIBITORS



(57) Abstract: The invention relates to thiazole and pyrazole derivatives of formula (I) wherein Q is S and X is C, or Q is CH and X is N; R₁ is unsubstituted or substituted phenyl; and R₂ is unsubstituted or substituted aryl or heteroaryl; or a salt of the said compounds, and to processes for the preparation thereof, to pharmaceutical compositions comprising such derivatives and to the use of such derivatives for the preparation of pharmaceutical compositions for the treatment especially of a proliferative disease, such as a tumour disease, in particular such diseases which respond to an inhibition of the Flt-3 kinase.

WO 2005/047273 A1